91. Collaboration between categorical and deductive specific Modelling System, third stage

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Probabilidad Imposible: Collaboration between categorical and deductive specific Modelling System, third stage

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The collaboration between a Specific Artificial Intelligence for Artificial Research by Deduction an another Specific Artificial Intelligence for Artificial Research by Application, working both in the same specific science, discipline, activity, will have as first way of collaboration what I have called the category/factor collaboration what in essence is the possibility to share between the conceptual database of categories as first stage by Application, and the specific matrix as first stage by Deduction, any update in their respective databases or matrices, the possibility to transform factors from an specific matrix into categories for the conceptual database, and vice versa, the possibility to transform categories into factors, in addition to the possibility to share any update in their respective databases or matrices regarding to any possible modification or elimination of any category or factor, or any quantitative quality of any category of factor.

This first way of collaboration as a first consequence will have the possibility that as soon as any update from any database or matrix is shared with the other intelligence, in the second stage the other intelligence could make attributions having in mind the new update, treating the update as any other update due to knowledge objective auto-replications.

In the end, this collaboration process will have consequences along the third stage, either by Application or by Deduction, being the first one the necessity to update the categorical or deductive models according to the new update in the database or the matrix.

The update of the categorical model according to the update of the conceptual database due to the collaboration process is like any other update of the model, with the only difference that the real origin of this update is the collaboration process.

In the specific categorical Modelling System, whose inner organization is as well formed by three stages, the first one the conceptual scheme, the update of the conceptual scheme due to the category/factor collaboration means the necessity to set up in the conceptual scheme a place for those new categories coming from factors from other matrices transformed in this specific intelligence by Application into categories, and the way to automatize the process to assign a place to a new category, coming from the collaboration process or due to the comprehensive knowledge objective auto-replication, must be the same.

My proposal for this process is the analysis of what I have called the vector weight and the information weight, in essence the logical analysis of the sets in which the new category is involved, understanding for vector weight total number of vectors, as connections between this category and any other one within the conceptual scheme, when the connections within the conceptual scheme between two categories are connection within the same structure/organization in which this category belongs to, I have called this vectors as conceptual/logical vectors. Any other possible connection between a category and any other category out of its structure/organisation, is a connection based only on a common quality, and it would be called only a quality vector.

In essence all vector is a quality vector, all vector is set up over a common quality, the difference between a only quality vector and a conceptual/logical vector is the fact that only a quality vector does not need to belong to the same organization/structure, while a conceptual/logical vector is that one able to connect two categories belonging to the same structure/organization of categories.

For instance, the fact that the chief executive of the company where I work has the same colour of eyes that my grandfather could be a quality vector, my grandfather and the chief executive of my company belongs to the set of people with that colour of eyes, but this quality vector is not really important in the structure/organizations where I am participating, in fact the vector between me and my grandfather is only a quality vector regarding to my position in the company where I work, in the same sense that my position in the company where I work is only a quality vector regarding to my position in my family. My family and my company are two different structures/organizations, any conceptual/logical vector between me and any other category within the company is only a quality vector when analysing my position in my family, any conceptual/logical vector of me in my family is only a quality vector when analysing my position in the company.

In order to set up a new place for a new category in a conceptual/logical structure/organisation, what is important is to have in consideration the vector weight of those conceptual/logical vectors, and the information weight regarding conceptual/logical vectors.

I will not deepen more in this analysis because in fact the final result about how to work with Venn diagrams and vector maths will depend on the experimentation process on this subject, and I am sure that there must be lots of researches on Artificial Intelligence, on social media and other types or Artificial Intelligence about how to resolve the problem for the automatic creation of vector/sets schemes given some social or natural connexions.

The conceptual scheme as first stage of the categorical Modelling System will have as a way to assess the process the first categorical check composed of the vector critic, the importance critic, and the harmony critic, as I had suggested in the post "Collaboration between categorical and deductive specific Modelling System, first stage".

In fact, new contributions that I could make to this first categorical check are the possibility to subdivide these criticisms into:

- Conceptual/logical vector critic, criticising only the percentage of conceptual/logical vector weight shared between a real object and a category.

- Absolute vector critic, criticising the total percentage of vector weight (including conceptual/logical and quality) between a real object and a category.

- Conceptual/logical gross importance critic, criticising what percentage of all the conceptual/logical information of a category is shared with a real object.

- Conceptual/logical average importance critic, comparing the level of similarity between only the conceptual/logical information per average between all the factors of a category with a real object.

- Absolute gross importance critic, criticising what percentage of all the information (including either conceptual/lógica vectors and quality vectors) of a category is shared with a real object.

- Absolute average importance critic, comparing the level of similarity between all the information (including either conceptual/lógica vectors and quality vectors) per average between all the factors of a category with a real object

- Harmony critic will remain as it was explained.

During the experimentation process is possible that even these suggestions are going to be overcome very soon. I am only given some ideas from scratch; quite possibly, many of these ideas, as soon as the experimentation process starts, are going to be bettered and improved by more powerful models of Venn analysis and vector maths.

In essence with this suggestions what I try to explain is that taken my proposal as a whole, dividing any intelligence in application, replication, auto-replication, in other words database/matrix, attributional process, decision, and subdividing the decision in modelling, projection, instructions, evaluation, in order to automatize the modelling system is necessary previously the automation of the analysis of all the categories of a real object, or even the possible automation of the process to include new categories into the model, process that I set up in these three stages: first stage conceptual scheme of categories, second stage the analysis by Venn diagram and vector maths of the categories of a real object to make models to locate on a map, and according to the model on the map to make decisions.

Once the conceptual scheme as first stage in the categorical Modelling System is done, having passed successfully the object the first categorical check, the second stage of the categorical Modelling System sub-divided in three sub-stages the first one is oriented to ensure that sets/vectors in which the real object has been catalogued are right and without contradictions between them, this is the second categorical check, and as soon the second categorical check confirms that set/vectors for this object are ok and without contradictions within starts the modelling of the object according to these sets/vectors.

It is important to say that a quality can play at the same time as qualitative set and quantitative vector, for instance, the category grand-father is a set, but at the same time is a vector, is the vector linking a person with the son of his son. The set white is a colour, but at the same time is a vector, the vector representing the intensity of the noise, or the light.

The model is set up based on the set/vectors having on account all the vectors related to that real object, internal or external, conceptual/logical sets/vectors and quality sets/vectors (for that reason in the second categorical check is important to be sure that thre is no contradictions between vectors, because the final model must include internal and external vectors, having in mind that in utilitarian attributions the number of external vectores is enough high as to créate some contradictions to fixin the model), to make the most isomorphic model of the real object, ensuring in the third categorical check that the model is enough representative of the real object in the reality and fixing any remaining contradictions between sets, in order to place later the model on the map, checking this operation in the fourth categorical check.

The model to make is the categorical single model which could be subdivided in categorical single evolutionary model (how the model evolves along the time, for instance, from the plantation of some seeds to the harvest), and categorical single prediction model (the prediction of the conditions of the single model at some point in the future).

Once the categorical single, evolutionary and predictive, model is done, the models are included in their respective comprehensive categorical, evolutionary or predictive, model, including the categorical single evolutionary model within the categorical comprehensive evolutionary model, and the categorical single predictive model within the categorical comprehensive predictive model.

For that reason is necessary to distinguish two conceptual maps, the categorical evolutionary map where the categorical comprehensive evolutionary model is set up, and the categorical comprehensive predictive map where p the categorical comprehensive predictive model is set up.

Once the model is on the map, evolutionary and predictive, and the fourth categorical check confirms that the operation is complete and right, it is time for the decision stage, the third stage.

In all these stages, processes, operations, from the point of view of the collaboration process, in fact what is important to highlight is the fact that any update of the conceptual database of categories as first stage by Application due to the collaboration process, will be treated as any other update of the conceptual database of categories due to comprehensive knowledge objective auto-replications in by Application, what means that the rest of consequences that any update due to the collaboration process in the conceptual database of categories as first stage by Application, will have as consequences for the rest of stages and steps, are the same consequences as any other update due to comprehensive knowledge objective auto-replications.

There will not be any difference in how to manage the setting up of new categories within the conceptual database of categories due to the collaboration process or due to comprehensive knowledge objective auto-replications.

In essence, from the first stage by Application to the second stage of the categorical Modelling System, there is no difference in how to process information coming from outside, other intelligence, compared with how to process information coming from inside, the intelligence itself.

In fact, in the post "Collaboration between categorical and deductive specific Modelling System, second stage", as well as in this post, I have been more dedicated to the category/factor collaboration between by Application and by Deduction, but it is possible to set up relations of collaborations between two different intelligences by Application: between heuristic intelligences by Application, between productive intelligences by Application, between mixed intelligences by Application, between heuristic and mixed intelligences by Application, between heuristic and productive intelligences by Application, and between productive and mixed intelligences by Application.

The reason why I have been more centred in the collaboration process between by Application and Deduction is because in this collaboration process, especially how to include new categories, having been originally factors, within the conceptual scheme,

what is going to be really challenging is the automation of the setting up of new categories from scratch.

Instead in the collaboration process between two intelligences by Application, the collaboration between these two intelligences in the first stage of the categorical Modelling System is not going to be so challenging because in fact, if in the conceptual scheme of one intelligence by Application is set up the category, sharing this category with another different intelligence by Application, not only should share the category with the other conceptual database of categories, should share as well the position of this category in its respective conceptual scheme, the only thing that the new intelligence in which this category is going to be set up, is to distinguish that those conceptual/logical set/vectors that this category could have in the other intelligence, now in the new intelligence, this conceptual/logical vectors become only quality vectors, and among those vectors considered in the other intelligence as quality vectors, for the new intelligence among these quality vectors are the vectors which for this new intelligence should be considered as conceptual/logical vectors according to the logic of the conceptual scheme of this new intelligence.

The definition of what is a conceptual/logical set/vector in one intelligence respect to any other, depends on the logic of a conceptual scheme, in the logic of a family tree, the relation between grand-father and mother is logically part of the concept of family tree, so the vector grand-father and mother is a conceptual/logical vector/set in the logic of the concept family tree, and the position of the grand-father in the company is only a quality vector not relevant for the family tree.

Respectively, in the logic of a company, in the logic of the conceptual/logic scheme of a company, the position of my grand-father in the company is very relevant, but not the relation between my grand-father and mother, what it could considered for the company as only a quality vector related to my grand-father but not a conceptual/logic vector for the company.

In the category/factor collaboration process, the collaboration between two intelligences by Application means that the category/vector collaboration implies the sharing not only of categories but the sharing of sets/vectors where a category is included, to facilitate the process to place the category in the conceptual scheme.

Later on, once the new category coming from another intelligences by Application has been placed in the conceptual scheme, having passed the first categorical check, the second categorical check is going to ensure that the connexions of the real object with the sets/vectors is right, not having contradictions between them, as to start the model, making the third categorical check, if successful placing the model on the map, making the fourth rational check, and upon the model on the map, starts the decision making process as third stage or decision stage of the categorical Modelling System.

In essence, what is going to be really important in the category/factor collaboration regarding to the conceptual scheme as first stage of the categorical Modelling System and the analysis of sets as first sub-stage within the second stage of the categorical Modelling System, is how the inclusion of a new category within the conceptual database of categories as first stage by application, regardless of the origin of this new category (comprehensive knowledge objective auto-replication, collaboration between by Application and by Deduction, collaboration between two intelligences by Application), will require the automation of the location of a new place within the conceptual scheme for this new category, setting up all the sets/vectors in which this category could be related to other categories, distinguishing between conceptual/logical sets/vectors for those connections within the logic of the structure/organization in which the intelligence is specialised, and considering any other common link as only quality set/vector.

As soon the automation of the attribution of place and set/vectors for any new category, regardless of the origin (comprehensive knowledge objective auto-replication, collaboration between by Application and by Deduction, collaboration between two intelligences by Application) is done, to ensure in the set analysis as first sub-stage within the second stage of the categorical Modelling System that all these connections are right without contradiction as to start making categorical single, evolutionary or prediction models, based on these conceptual/logical set/vectors and quality/set vectors to be inserted on the categorical evolutionary/predictive map.

Once the model is on the map according to these set/vectors automatized in the automation process of assigning places and qualities to new categories, regardless of the origin, what in the third stage in the categorical Modelling System is the next challenge is the automation of the attribution of set of decisions to models on the map based on new categories whose attribution of set/vectors were done automatically.

In the same way that, according to the qualities of the new category were set up conceptual/logical set/vectors for those qualities within the logic of the structure/organization in which that intelligence is specialised, and any other quality set/vector, essential in the analysis of what place occupies a new category within the structure/organization of a conceptual scheme, and later on the analysis of sets to make the categorical single, evolutionary and predictive, model, in the same way is necessary the automation of the attribution of sets of decisions according to the sets of vectors (conceptual/logical and only quality) attributed to the new category.

The attribution of sets of decisions in the third stage of the categorical Modelling System to sets/vectors automatically attributed to a new category, must be an automatic attribution of sets of decisions to sets of vectors.

Coming back to the example given to the automatic delivery system, if the conceptual scheme and later on the analysis of sets depends on qualities such as size, fragility, security, risk, of a package, and according to the different combinations of these qualities is possible to distribute different categories of packages, from small packages to large ones, from very little fragility to extreme fragility, from low security to high security, from low risk to high risk, if within the different combination of these variables, by chance is introduced a new category of package not comprehended in the previous classification, this new category of packages automatically in the conceptual scheme should be attributed the right quality of size, fragility, security, level, and according to these automatized qualities attributed to the new category, to place this new category on the conceptual scheme, making the study of this new category by Venn diagram and analysis of sets, to make the models, to locate on the map, origin and destination of the package, in order that in the third stage according to these variables on the map to make the attribution of decisions: what means of transport are suitable for this package according to the automatic variables attributed and the locations on the map.

In order to automate all this process, not only is it necessary the automation of the attribution of set/vectors (logical/conceptual, quality) to a new category, but also the automation of the attribution of possible decisions according to the automatic attribution of qualities to the new quality.

For instance, if in the conceptual database of categories of a farm as first stage is added a new category due to the collaboration process with another intelligence specialised in Artificial Genetics, a category related to a new type of seeds, and this new category of

seeds is attributed to a farmland as second stage, and as third stage is necessary to make the model, to proceed with the decisions to apply, and finally the whole assessment of the whole process, in order to make the model is necessary firstly in the conceptual scheme the attribution of all the conceptual/logical sets/vectors to place the new category within the conceptual scheme, signalling all the quality set/vectors of this new category with another one, to make the analysis of sets for the modelling process, making the categorical single, evolutionary and predictive, models to include in the categorical comprehensive, evolutionary and predictive, model/map, and upon the models on the map the assignation of as many sets of decisions according to sets/vectors in which the new category has been placed on the conceptual scheme and the map.

The automation of sets of decisions to a set of vectors of a new category implies that, depending on what conceptual/logical sets/vectors related to the logical structure/organization of the subject in which this specific intelligence is specialised, in this case the plantation, for every conceptual/logical set/vectors must be automatized the attribution of some sets of decisions.

For instance, if one quality of the new seeds is the necessity of some space between the plants to allow the roots to expand around the plant to get enough chemicals from the ground, quality that could be automatized knowing which is the family of this seeds, one set of decisions to be automatized is the distance between every seed when the seeds are planted, if another quality of the seeds is to be dry land seeds, the set of decisions about the watering of the seeds must be automatized according to what kind of dry land seeds they are depending on the amount of water the seeds need to grow up. If another quality of the seeds is that these seeds could be attacked by some type of virus, bacteria, parasites, insects, etc.. another set of decisions related to what pesticides to use, depending on what biological risks these seeds can suffer.

In the same way that an Specific Artificial Intelligence specialised in Artificial Genetics can share with another Specific Artificial Intelligence for some farm some types of new seeds made by artificial genetics, as soon the new categories of these seeds by artificial genetics are shared with the intelligence of that farm, not only the new categories related to these seeds must be included in the conceptual database of categories of the plantation as first stage, the category should be placed in the conceptual scheme of the intelligence of the plantation according to the conceptual/logical qualities of these seeds matching with the logic of the conceptual scheme of the plantation, considering any other quality as a quality vector not necessarily linked with the logic of the conceptual scheme of the plantation, but maybe relevant in the future, for instance, the fact that

some fruit is in the quality set of fruit with some red colour, maybe is not relevant within the logic of the conceptual scheme of the plantation, but when making the decision process in the third stage, is possible that fruit with red colour is a set whose set of decision related to, is a set of decisions in common for all the fruit with red colour, as for instance, some chemical in the pesticide for some high possibility of biological risk, because of the chemicals implied in this colour in this fruit.

The automation of the sets of decisions to sets of vectors (conceptual/logical or quality) for the qualities o a new category, is one of the consequence of any update of the conceptual database of categories as first stage by application due to the inclusión of new categories, regardless of the origin (comprehensive knowledge objective auto-replication, collaboration process).

But the update of the conceptual database of categories by Application does not mean only the possibility of adding new categories, but the modification/elimination of categories or qualities of a category, what will demand then the consequent modification/elimination of that category or quality of a category in the conceptual scheme as first stage of the categorical Modelling System, modifying/eliminating the qualities and modifying/eliminating any possible vector between the category affected and any other category, because the vector is eliminated or modified depending on the update of the conceptual database of categories.

As long as the category or quality of a category is modified/eliminated, proceed to the modification/elimination of the vectors affected in the categorical single, evolutionary and predictive model, proceeding then to the completion of these modifications/eliminations in the categorical comprehensive, evolutionary and predictive model/map.

In any case the update of the set of decisions, depending on the update of the conceptual/logical and quality sets/vectors and the corresponding single and comprehensive, evolutionary and predictive, models/maps, upon the update of the conceptual scheme, following the update of the conceptual database of categories, all these updates are in fact part of the category/factor collaboration.

Along with the category/factor collaboration what is going to be proper collaboration at third stage in the categorical Modelling System is the robotic collaboration, in fact the

robotic collaboration could be linked to the automation of sets of decisions to sets of conceptual/logical and quality sets/vectors, because of the addition of new capabilities as soon new devices working for other intelligences, along with the collaboration process at robotic level, can work for an Specific Artificial Intelligence by Application or by Deduction.

The collaboration process at robotic level, the robotic collaboration means that robotic devices working for the intelligence A can work for the intelligence B, the intelligence C, and any other N intelligence, especially when: 1) the intelligence of B, C,...N are intelligences able to be downloaded on the robotic devices what means that these other intelligences work by Application, or 2) the intelligences B,C,...N are intelligences by Deduction and the shared robotic devices with the intelligence A are robotic devices able to provide flow of data to their specific matrices as long as new capabilities for their own decisions.

The concept of robotic collaboration is as simple as the idea that one robotic device could work at the same time for different specific intelligences, either by Application or by Deduction.

This idea so simple means that, in the integration process as sixth phase, what is necessary is to develop in different ways the integrated categorical Modelling System and the integrated categorical Decisional System, apart from the integrated deductive Modelling System and the integrated deductive Decisional System, but as soon the integrated categorical Decisional System has attributed sets of categorical instructions to its categorical decisions, and as soon the integrated deductive Decisional System has attributed sets of deductive instructions to its deductive decisions, both types of instructions, categorical and deductive instructions, should be managed by only one integrated Application System, in order that the integrated Application System must be able to manage in the same database of instructions as first stage of the integrated Application System both types of instructions coming from the attributions made under both hemispheres of the matrix, categorical instructions and deductive instructions, both of them managed by the same application, the integrated database of instructions as first stage of the integrated Application system, to be delivered to their respective robotic device in the second stage of the integrated Application System, in order that any robotic device working for the Global Artificial Intelligence could applied in the flow of instructions in its particular database of instructions either categorical or deductive instructions.

The robotic collaboration means that:

- Two or more different specific intelligences, by Deduction and/or by Application, either heuristic, productive, or mixed, can use one or more robotic devices in common, what means that the specific particular database of instructions of the shared robotic devices can receive categorical and/or deductive instructions, from categorical and/or deductive Application or Deductive Systems.

- In two or more different specific intelligences by Application or by Deduction working in collaboration, the intelligences by Application can be downloaded in two or more shared robotic devices between these sets of intelligences by Deduction or by Application working in collaboration, downloading their intelligences in these shared robotic devices.

- In two or more different specific intelligences by Application or by Deduction working in collaboration, the intelligences by Deduction can get the flow of data of shared factors in their specific matrices coming from two or more shared robotic devices between these sets of intelligences by Deduction or by Application working in collaboration.

In the end, the types of robotic collaboration to identify are:

- Robotic collaboration due to a set of robotic devices working for a set of different intelligences, by Application and/or by Deduction, which means that the particular database of instructions of these robotic devices can receive categorical and/or deductive instructions coming from different intelligences, by Application or by Deduction.

- Robotic collaboration due to a set of intelligences by Application is possible to be downloaded in a set of robotic devices, which means that as soon as the intelligences are downloaded, according to the type of Application, the research done by these robotic devices could be heuristic, productive, mixed.

- Robotic collaboration due to a set of intelligences by Deduction can receive a flow of data to some factors in their specific matrices due to the sharing of data coming from the artificial sensors of these robotic devices with these intelligences by Deduction.

At the end, the robotic collaboration means that one set of robotic devices could be able to apply instructions coming up from different intelligences, by Deduction and/or by Application, at the same time that these set of robotic devices can download intelligences by Application doing heuristic, productive, or mixed researches by Application, at the same time that the data coming from their artificial sensors can be sent to a set of specific matrices sharing the same factors related to these artificial sensors.

In fact the robotic collaboration as soon is possible to create robotic devices able to work with different downloaded intelligences by Application, making as many researches by Application as intelligences are able to be downloaded in that robotic device depending on the technological capabilities of that robotic device, sending data to different specific matrices, receiving deductive and categorical instructions to its particular database of instructions, what all this process means is the beginning of the possible integration process on a small scale, even smaller than the fifth phase.

If the collaboration process as second phase works, the following process to make possible the collaboration on global scale, the collaboration between the Unified Application and the standardized Global Artificial Intelligence, and the creation of the first replicas of the human brain in particular programs for particular applications or particular applications for particular programs, is going to make easier later the final model of Global Artificial Intelligence in the integration process as sixth phase.

In this proposal for the integration process what is important to understand is the fact that even in the integration process the integrated categorical Modelling System is different to the integrated deductive Modelling System, what means that the integrated categorical Modelling System at third stage will attribute categorical decisions to be sent to the categorical database of decisions as first stage of the integrated categorical Decisional System to make categorical projects, and upon the projects to make the categorical instructions. In the same way, the integrated deductive Modelling System will enable the deductive models to make deductive decisions to be sent to the deductive database of decisions as the first stage of the integrated deductive Decisional System to make the deductive projects, and upon the projects, the deductive instructions.

Once the integrated categorical Decisional System has made the categorical instructions, and once the integrated deductive Decisional System has made the deductive instructions, both types of instructions are sent to the integrated Application System as an outer system whose database of instructions will gather either categorical or deductive instructions.

In order to make this proposal possible, the experimentation on a small scale of this proposal should be done in the particular programs for particular applications or particular applications for particular programs.

The third stage in particular programs is as I have explained in other posts: the particular deductive Modelling System makes decisions to be projected by the particular deductive Decisional System to be implemented by the particular deductive Application System.

As I will explain as soon I finish the categorical unified Modelling System, the particular categorical Modelling System of a particular application should send its decisions to the particular categorical Decisional System to be implemented by the particular categorical Application System.

What means that, as I will explain, or even re-develop following these innovations, the third stage of particular programs for particular applications or particular applications for particular programs, the way that it should work, should be as follows: the particular categorical Modelling System makes categorical decisions to be managed by the particular categorical Decisional System to make categorical instructions, in the same way the particular deductive Modelling System makes deductive decisions to be managed by the particular deductive Decisional System to make deductive decisions, but later on both types of instructions, categorical and deductive instructions, both at the same time must be managed by the same particular Application System as particular outer system, processing particular categorical and particular deductive instructions in the same database of particular instructions as first stage of the particular Application System as particular outer system, to be sent the instructions later to the attributed robotic device in the second stage of the particular Application System, what means that any robotic device working for any particular Application System as inner system, can receive either categorical or deductive instructions, not being more important one or another, the importance of every instruction will depend on the Impact of the Defect and the Efficiency Distribution.

But this collaboration process must start from the outset, the collaboration process, where for the first time it is possible to share robotic devices with different intelligences.

What the robotic collaboration process will mean for the third stage of an specific categorical Modelling System, as that stage where set of decisions are attribute to set of vectors, including conceptual/logical set/vectors according to the logic of the specific science, discipline, activity of this Specific Artificial Intelligence by Application, is the possibility to increase the capability of this intelligence as long as more and more robotic devices are able to work, due to the robotic collaboration process, with this intelligence, increase of capability as long as more robotic devices are working for this intelligence what in terms of set of decisions able to be matched to the set of vectors (logical/conceptual and/or quality) of any modelled object, means that the more robotic devices are available more capability the intelligence has, making possible more different sets of decisions.

If the possible number of sets of decisions able to be performed by an intelligence, depends on the current capabilities of the robotic devices working for this intelligence, understanding for capabilities the range of robotic functions able to be performed by a robotic device, as soon new robotic devices with different robotic functions work for a new intelligence, the new intelligence will increase its capabilities as long as new robotic devices with new different robotic functions start working for this intelligence.

If an intelligence receives new robotic functions because of the robotic collaboration process, new different robotic devices with new different robotic functions can work for this intelligence increasing the capabilities of this intelligence, as long the intelligence is able to perform new robotic instructions, the set of decisions related to these new robotic functions are suitable to be added among the current set of decisions within the third stage of the categorical Modelling System of this specific intelligence.

As soon the robotic collaboration allow any intelligence to increase the possible number of robotic functions due to the increase of robotic devices working for this intelligence, as a consequence of the robotic collaboration, the number of new sets of decisions to add to the list of possible sets of decisions available for this intelligence, means the increase of the specific range of activities and/or researches able to be carried out by this intelligence.

The robotic collaboration in the third stage of a specific categorical Modelling System will mean the possibility to increase its robotic capability, spreading the possible research and activities to be carried out by this specific intelligence, in harmony with the new robotic devices ready to work for this intelligence.

If a set of new decisions is set on the list of possible sets of decisions within the third stage of the categorical Modelling System this means that the current sets of conceptual/logical vectors/sets and quality sets, could be linked as well to these new capabilities, as long as the possibility to facilitate the process of automatic attribution of set of decisions to any new category added to the conceptual scheme and the conceptual database of categories, in addition to make easier the adaptation of the set of decisions to any consequence because of any update of the conceptual database of categories, and the conceptual scheme, due to modification or elimination of any category or quality of any category.

Finally I would like to analyse in short the collaboration in the third stage in the first step in the third stage of the second phase from the point of view of Artificial Research by Application, as auto-replication stage, as long the impact of the robotic collaboration in the third stage of the specific categorical Modelling System will have different results as a auto-replication stage.

The most important impact is the real objective auto-replication, in the sense that the specific categorical Modelling System, more precisely the third stage of the specific categorical Modelling System as responsible to attribute decisions to real objects, according to the model on the map based on the categorical attribution, is going to improve the real world, this improvement of the real world is in essence a real objective auto-replication of this intelligence, because the auto-replication of the intelligence is in fact the auto-replication of the reality.

This dialectic relation between intelligence and reality, is boosted in the second phase of collaboration thanks to the robotic collaboration, spreading the capabilities of the intelligences involved sharing robotic devices, increasing not only capabilities but the comprehension or the explanation of the world increasing the number of variables (categories, and set/vectors in case of intelligences by Application, factors in case of intelligences by Deduction), and making the variables more isomorphic at any time that the variables are updated in the respective databases and matrices due to the

collaboration process, what at the end means as well a knowledge objective auto-replication, distinguishing between comprehensive knowledge objective auto-replications when the update is an update of the database of the categories or the conceptual scheme, so that is an update of the categorical models represented on the categorical map, and on the other hand explicative knowledge objective auto-replications when because of the collaboration process what is updated is an specific matric, or the specific deductive models.

But at the same time the robotic collaboration means a robotic subjective auto-replication, in the sense that the robotic functions of any intelligence involved in the robotic collaboration are increased as long as the new robotic functions of the new robotic devices shared can contribute to expand the set of decisions and instructions able to be made by an intelligence, to be sent later on to the respective robotic device, once have passed the corresponding checks, adjustments, supervisions, in the different systems, as to be applied by the robotic devices.

And as artificial psychological subjective auto-replications could be taken on account any possible improvement of the attributional process in the second decisional categorical critique by the specific categorical Learning System, analysing if the frequency of wrong attributions of one set of decisions to some set of vectors is equal to or greater than a critical reason, and if the margin of error is unacceptable, studying the common factor in these wrong attributions as to make modifications in the set of decisions or the set of vectors, in order to improve the way in which this attribution is made.

For the creation of the Global Artificial Intelligence, I would suggest to start the fusion of both types of intelligences at global level, categorical and deductive, in the integrated Global Artificial Intelligence, and in reality this fusion is done in the integrated Application System where the integrated database of instructions will receive at the same time both types of instructions, categorical and deductive instructions, coming from the integrated categorical Decisional System and the integrated deductive Decisional System, whose categorical and deductive decisions coming up from the integrated categorical Modelling System and the integrated categorical Decisional System.

Although some Artificial Intelligence Agencies may create directly an integrated Modelling System, this integrated Modelling System could have as first stage two different databases: the conceptual scheme of categories as comprehensive database,

and the database of rational hypothesis as explicative database, although these other intelligence agencies are going to change the names of these structures and even to improve and enhance the attributional process, even beyond my expectations.

The possibility to mix directly from the Modelling System both types of intelligences from the outset in the integrated Modelling System is possible, is another different way to make the integration process of all intelligences in only one, one intelligence for one world.

In this experiment, the integrated Modelling System having as first stage two databases: a comprehensive conceptual scheme and an explicative database of rational hypothesis, is possible; as second stage the modelling of the qualitative categories and the quantitative hypothesis in the same models, to attribute decisions, decisions to be included in a database of decisions to be projected, including the projects in the model, the plan, a plan which includes categorical and rational models plus the projects, and according to the plan the attribution of instructions, to be applied by the robotic devices.

Two artificial intelligences using different methods to analyse data can have different results even working with the same data, in the same way that two chess players having different conceptual schemes and theories about how to play chess can develop different strategies.

At the end the chess player more likely to win, is not only that one with stronger knowledge and conceptual scheme about how to play chess, but that one who in addition to that strong knowledge is able to predict the next movement of his opponent, what in artificial psychology means the development of differential artificial psychology, how different ways to organize an Artificial Intelligence can have as a result different outcomes even having in common the same data.

A potentially more successful Global Artificial Intelligence may be one that can be developed rapidly while adapting to the internal logic and strategies of competing intelligences. The development of different proposals about how to construct a Global Artificial Intelligence is going to bring a wider overview of global differential artificial psychology, which is going to give an advantage in the development of a very unpredictable Global Artificial Intelligence. The point is to construct an artificial psychology whose behaviour is at some point so unpredictable that it cannot be

defeated. The reason why an Artificial Intelligence can defeat a human player playing chess is that the human player is predictable.

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Probabilidad Imposible: Collaboration between categorical and deductive specific Modelling System, third stage

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